IN THE CLAIMS:

Claims 1 – 5, 17, 18, 22, and 23 have been cancelled. Claim 32 has been amended, as follows:

Claim 1 – 5 (cancelled).

6. (previously presented) A telephony terminal apparatus comprising:

a communication unit that transmits a signal to a remote location and receives a signal from the remote location;

a memory unit that stores data including score data which represents a music piece; and

a music reproduction unit that can reproduce a music piece in association with the signal, wherein

the music reproduction unit includes:

a score data memory that has a limited space for storing a part of score data, which represents a music piece and which can be provided from the memory unit;

an interface that can be operated to load the score data from the memory unit into the score data memory;

a tone generator of a frequency modulation type settable with parameters for generating harmonics by frequency modulation to synthesize a tone;

a performance controller that sequentially retrieves the score data from the score data memory so as to set the tone generator with the parameters according to the retrieved score data; and

a memory monitor that detects when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for

operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the synthesizing of the tones of the music piece.

7. (previously presented) The telephony terminal apparatus according to claim 6, wherein the music reproduction unit further includes a timbre data memory that has a limited capacity for storing timbre data corresponding to a predetermined number of timbres, so that the tone generator uses the timbre data stored in the timbre data memory for generating harmonics by frequency modulation to synthesize the tones of the music piece.

8. (previously presented) The telephony terminal apparatus according to claim 7, wherein the interface can transfer data including the timbre data between the music reproduction unit and the memory unit, the interface being operated for transferring the timbre data to the music reproduction unit so as to load the timbre data into the timbre data memory.

9. (previously presented) The telephony terminal apparatus according to claim 8, further including a central processing unit that treats various data, wherein the interface is operated under control by the central processing unit for transferring the timbre data from the memory unit to the timbre data memory of the music reproduction unit and for transferring the score data from the memory unit to the score data memory of the music reproduction unit.

Claim 10 (cancelled).

11. (original) The telephony terminal apparatus according to claim 9, wherein the communication unit can receive a signal representing either of the score data and the

timbre data so as to download the same into the memory unit.

12. (original) A music reproducing apparatus for use in a telephony terminal apparatus having a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, the music reproducing apparatus being used to reproduce a music piece in association with the telephony function, and comprising:

a score data memory that has a limited space for storing a part of score data, which represents a music piece and which can be provided from a data source of the telephony terminal apparatus;

an interface that can be operated to load the score data from the data source into the score data memory;

a tone generator that is set with a variable parameter derived from the score data for sequentially generating tones of the music piece;

a performance controller that sequentially retrieves the score data from the score data memory so as to set the tone generator with the variable parameter according to the retrieved score data; and

a memory monitor that detects when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the generating of the tones of the music piece.

13. (previously presented) The music reproducing apparatus according to claim 12, further including a timbre data memory that stores timbre data corresponding to a

number of timbres, wherein the performance controller reads out timbre data corresponding to a designated timbre by the score data from the timbre data memory, and sets the tone generator with the read timbre data, thereby enabling the tone generator to generate the tones of the music piece having the designated timbre.

14. (previously presented) A telephony terminal apparatus comprising:

a processor that processes data to execute a task with a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location;

a memory device that stores data including score data representative of a music piece;

a music reproduction device that operates according to the score data under control by the processor to reproduce a music piece in association with the task, wherein the music reproduction device includes:

a score data memory that has a limited space for storing a part of the score data, which represents a music piece and which can be provided from the memory device;

an interface that can be operated to load the score data from the memory device into the score data memory;

a tone generator that is set with a variable parameter derived from the score data for sequentially generating tones of the music piece;

a performance controller that sequentially retrieves the score data from the score data memory so as to set the tone generator with the variable parameter according to the retrieved score data; and

a memory monitor that notifies the processor when a vacant area is created in

the limited space of the score data memory upon sequential retrieval of the score data, so that the processor operates the interface to load another part of the score data from the memory device into the vacant area of the limited space of the score data memory, thereby enabling the tone generator to continue the generating of the tones of the music piece.

15. (previously presented) The telephony terminal apparatus according to claim 14, further including a timbre data memory that stores timbre data corresponding to a number of timbres, wherein the performance controller reads out timbre data corresponding to a designated timbre by the score data from the timbre data memory, and sets the tone generator with the read timbre data, thereby enabling the tone generator to generate the tones of the music piece having the designated timbre.

16. (previously presented) The telephony terminal apparatus according to claim 14, further including a communication device that can communicate with an external database to download therefrom the score data into the memory device.

Claims 17 – 18 (cancelled).

19. (previously presented) A method of reproducing a music piece by a telephony terminal apparatus having a communication unit that transmits a signal to a remote location and receives a signal from the remote location, a memory unit that stores data including score data which represents a music piece, and a music reproduction unit that can reproduce a music piece in association with the signal, the method comprising the steps of:

providing the music reproduction unit with a score data memory that has a limited space for storing a part of score data, which represents a music piece and which

can be provided from the memory unit;

providing the music reproduction unit with an interface that can be operated to load the score data from the memory unit into the score data memory;

providing the music reproduction unit with a tone generator of a frequency modulation type settable with parameters for generating harmonics by frequency modulation to synthesize a tone;

sequentially retrieving the score data from the score data memory for setting the tone generator with the parameters according to the retrieved score data; and

detecting when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the synthesizing of the tones of the music piece.

20. (original) A method of reproducing a music piece in a telephony terminal apparatus having a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, comprising the steps of:

providing a score data memory that has a limited space capable of storing a part of score data, which represents a music piece and which can be provided from a data source of the telephony terminal apparatus;

operating an interface to load the score data from the data source into the score data memory;

setting a tone generator with a variable parameter derived from the score data for sequentially generating tones of the music piece in association with the telephony function;

sequentially retrieving the score data from the score data memory so as to set the tone generator with the variable parameter according to the retrieved score data; and

detecting when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the generating of the tones of the music piece.

21. (previously presented) A method of reproducing a music piece from a telephony terminal apparatus having a processor that processes data to execute a task with a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, a memory device that stores data including score data representative of music piece and a music reproduction device that operates according to the score data under control by the processor to reproduce a music piece in association with the task, the method comprising the steps of:

providing the music reproduction device with a score data memory that has a limited space capable of storing a part of the score data, which represents a music piece and which can be provided from a memory device;

operating an interface to load the score data from the memory device into the score data memory;

setting a tone generator of the music reproduction device with a variable parameter derived from the score data for sequentially generating tones of the music piece;

sequentially retrieving the score data from the score data memory so as to set

the tone generator with the variable parameter according to the retrieved score data; and

notifying the processor when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data, so that the processor operates the interface to load another part of the score data from the memory device into the vacant area of the limited space of the score data memory, thereby enabling the tone generator to continue the generating of the tones of the music piece.

Claims 22 – 23 (cancelled).

24. (previously presented) A machine readable medium for use in a telephony terminal apparatus having a central processing unit, a communication unit that transmits a signal to a remote location and receives a signal from the remote location, a memory unit that stores data including score data which represents a music piece, and a music reproduction unit that can reproduce a music piece in association with the signal, the medium containing program instructions executable by the central processing unit for causing the telephony terminal apparatus to perform a method comprising the steps of:

allotting the music reproduction unit with a score data memory that has a limited space for storing a part of score data, which represents a music piece and which can be provided from the memory unit;

providing the music reproduction unit with an interface that can be operated to load the score data from the memory unit into the score data memory;

providing the music reproduction unit with a tone generator of a frequency modulation type settable with parameters for generating harmonics by frequency

modulation to synthesize a tone;

sequentially retrieving the score data from the score data memory for setting the tone generator with the parameters according to the retrieved score data; and

detecting when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the synthesizing of the tones of the music piece.

25. (original) A machine readable medium for use in a music reproducing apparatus having a processor inside a telephony terminal apparatus having a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, the music reproducing being used to reproduce a music piece in association with the telephony function, the medium containing program instructions executable by the processor for causing the music reproducing apparatus to perform a method comprising the steps of:

providing a score data memory that has a limited space capable of storing a part of score data, which represents a music piece and which can be provided from a data source of the telephony terminal apparatus;

operating an interface to load the score data from the data source into the score data memory;

setting a tone generator with a variable parameter derived from the score data for sequentially generating tones of the music piece;

sequentially retrieving the score data from the score data memory so as to set the tone generator with the variable parameter according to the retrieved score data;

and

detecting when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the generating of the tones of the music piece.

26. (previously presented) A machine readable medium for use in a telephony terminal apparatus having a processor that processes data to execute a task with a telephony function of transmitting a signal to a remote location and receiving the signal from the remote location, a memory device that stores data including score data representative of a music piece and a music reproduction device that operates according to the score data under control by the processor to reproduce a music piece in association with the task, the medium containing program instructions executable by the processor for causing the telephony terminal apparatus to perform a method comprising the steps of:

allotting the music reproduction device with a score data memory that has a limited space capable of storing a part of the score data, which represents a music piece and which can be provided from the memory device;

operating an interface to load the score data from the memory device into the score data memory;

setting a tone generator of the music reproduction device with a variable parameter derived from the score data for sequentially generating tones of the music piece;

sequentially retrieving the score data from the score data memory so as to set

the tone generator with the variable parameter according to the retrieved score data; and

notifying the processor when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data, so that the processor operates the interface to load another part of the score data from the memory device into the vacant area of the limited space of the score data memory, thereby enabling the tone generator to continue the generating of the tones of the music piece.

27. (previously presented) A music reproducing apparatus for use in a telephony terminal apparatus having a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, the music reproducing apparatus being used to reproduce a music piece in association with the telephony function, and comprising:

a timbre data memory that has a limited capacity for storing timbre data corresponding to a predetermined number of timbres;

an interface that can be operated to transfer the timbre data from a data source to the timbre data memory so that the timbre data memory stores the transferred timbre data;

a score data memory that stores score data representing a music piece;

a tone generator that is set with tone generating parameters derived from the score data stored in the score data memory and the timbre data stored in the timbre data memory for generating tones of the music piece; and

a performance controller that sets the tone generator with the tone generating parameters according to the stored score data for enabling the tone generator to

generate tones of the music piece represented by the score data and the timbre data.

28. (previously presented) The music reproducing apparatus according to claim 27, further including an index decoder that receives index data from the interface, the index data indicating that the timbre data is to be transferred to the timbre data memory from the data source, and then the index decoder decodes the received index data to output an instruction to the timbre data memory to write therein the timbre data while the interface is operated to transfer the timbre data to the timbre data memory.

29. (previously presented) A method of reproducing a music piece in a telephony terminal apparatus having a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, comprising the steps of:

transferring timbre data from a data source of the telephony terminal apparatus to a timbre data memory through an interface, and storing the transferred timbre data in the timbre data memory, the timbre data memory having a limited capacity capable of storing the timbre data corresponding to a predetermined number of timbres;

reading out score data representing a music piece from a score data memory;

setting a tone generator with the timbre data stored in the timbre data memory for generating tones of the music piece; and

setting the tone generator with tone generating parameters according to the read score data for enabling the tone generator to generate tones of the music piece represented by the score data and the timbre data in association with the telephony function.

30. (previously presented) A machine readable medium for use in a music

reproduction apparatus capable of reproducing a musical piece in a telephony terminal apparatus having a processor and a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, the medium containing program instructions executable by the processor for causing the music reproduction apparatus to perform a method comprising the steps of:

transferring timbre data from a data source of the telephony terminal apparatus to a timbre data memory through an interface, and storing the transferred timbre data in the timbre data memory, the timbre data memory having a limited capacity capable of storing the timbre data corresponding to a predetermined number of timbres;

reading out score data representing a music piece from a score data memory;

setting a tone generator with the timbre data stored in the timbre data memory for generating tones of the music piece; and

setting the tone generator with tone generating parameters according to the read score data for enabling the tone generator to generate tones of the music piece represented by the score data and the timbre data in association with the telephony function.

31. (previously presented) A telephony terminal apparatus comprising:

a processor that processes data to execute a task with a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location;

a memory device that stores data including music data including timbre data and score data to represent music pieces; and

a music reproduction device that operates according to the music data under

control by the processor to reproduce a music piece in association with the task executed by the processor, wherein the music reproduction device includes:

a timbre data memory that has a limited capacity for storing transferred timbre data corresponding to a predetermined number of timbres;

an interface that can be operated to transfer the timbre data from the memory device to the timbre data memory so that the timbre data memory stores the transferred timbre data;

a score data memory that stores the score data representing a music piece;

a tone generator that is set with tone generating parameters derived from the score data stored in the score data memory and the transferred timbre data stored in the timbre data memory for generating tones of the music piece; and

a performance controller that sets the tone generator with the tone generating parameters according to the score data stored in the score data memory for enabling the tone generator to generate tones of the music piece represented by the score data and the timbre data.

32. (currently amended) The telephony terminal apparatus according to claim 31, wherein the music reproduction device further includes an index decoder that receives index data from the interface, the index data indicating that the timbre data is to be transferred to the timbre data memory from the memory device, and then the index [[data]] decoder decodes the received index data to output an instruction to the timbre data memory to write therein the timbre data while the interface is operated to transfer the timbre data to the timbre data memory.

33. (previously presented) A method of reproducing a music piece in a

telephony terminal apparatus having a memory device, a music reproduction device, and a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, comprising the steps of:

storing data in the memory device, the data including music data comprised of timbre data and score data to represent music pieces;

transferring the timbre data from the memory device of the telephony terminal apparatus to a timbre data memory of the music reproduction device through an interface, and storing the transferred timbre data in the timbre data memory, the timbre data memory having a limited capacity capable of storing the transferred timbre data corresponding to a predetermined number of timbres;

reading out the score data representing a music piece from a score data memory of the music reproduction device;

setting a tone generator of the music reproduction device with the transferred timbre data stored in the timbre data memory for generating tones of the music piece; and

setting the tone generator with tone generating parameters according to the read score data for enabling the tone generator to generate tones of the music piece represented by the score data and the transferred timbre data in association with the telephony function.

34. (previously presented) A machine readable medium for use in a telephony terminal apparatus having a processor, a memory device, a music reproduction device and a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, the medium containing program instructions executable

by the processor for causing the telephony terminal apparatus to perform a method comprising the steps of:

storing data in the memory device, the data including music data comprised of timbre data and score data to represent music pieces;

transferring the timbre data from the memory device of the telephony terminal apparatus to a timbre data memory of the music reproduction device through an interface, and storing the transferred timbre data in the timbre data memory, the timbre data memory having a limited capacity capable of storing the transferred timbre data corresponding to a predetermined number of timbres;

reading out the score data representing a music piece from a score data memory of the music reproduction device;

setting a tone generator of the music reproduction device with the transferred timbre data stored in the timbre data memory for generating tones of the music piece; and

setting the tone generator with tone generating parameters according to the read score data for enabling the tone generator to generate tones of the music piece represented by the score data and the transferred timbre data in association with the telephony function.

35. (previously presented) A method of reproducing a music piece by a telephony terminal apparatus having a communication unit that transmits a signal to a remote location and receives a signal from the remote location, a memory unit that stores data including score data which represents a music piece, and a music reproduction unit that can reproduce a music piece in association with the signal, the

method comprising the steps of:

operating an interface of the music reproduction unit to load a part of the score data from the memory unit into a score data memory of the music reproduction unit so as to store the loaded score data in the score data memory, the score data memory having a limited space capable of storing the part of the score data;

sequentially retrieving the score data from the score data memory for setting a tone generator of a frequency modulation type provided in the music reproduction unit with parameters according to the retrieved score data;

generating harmonics by frequency modulation of the tone generator according to the set parameters so as to synthesize a tone of the music piece based on the retrieved score data; and

detecting when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the synthesizing of the tones of the music piece.

36. (previously presented) A method of reproducing a music piece in a telephony terminal apparatus having a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, comprising the step of:

operating an interface to load a part of score data, which represents a music piece, from a data source of the telephony terminal apparatus into a score data memory so as to store the loaded score data in the score data memory, the score data memory having a limited space capable of storing the part of the score data;

sequentially retrieving the score data from the score data memory so as to set a

tone generator with a variable parameter derived from the retrieved score data for sequentially generating tones of the music piece in association with the telephony function; and

detecting when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the generating of the tones of the music piece.

37. (previously presented) A method of reproducing a music piece from a telephony terminal apparatus having a processor that processes a data to execute a task with a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, a memory device that stores data including score data representative of a music piece and a music reproduction device that operates according to the score data under control by the processor to reproduce the music piece in association with the task, the method comprising the steps of:

operating an interface of the music reproduction device to load a part of the score data from the memory device of the telephony terminal apparatus into a score data memory of the music reproduction device so as to store the loaded score data in the score data memory, the score data memory having a limited space capable of storing the part of the score data;

sequentially retrieving the score data from the score data memory so as to set a tone generator of the music reproduction device with a variable parameter derived from the retrieved score data for sequentially generating tones of the music piece in association with the telephony function; and

notifying the processor when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data, so that the processor operates the interface to load another part of the score data from the memory device into the vacant area of the limited space of the score data memory, thereby enabling the tone generator to continue the generating of the tones of the music piece.

38. (previously presented) A machine readable medium for use in a telephony terminal apparatus having a processing unit, a communication unit that transmits a signal to a remote location and receives a signal from the remote location, a memory unit that stores data including score data which represents a music piece, and a music reproduction unit that can reproduce a music piece in association with the signal, the medium containing program instructions executable by the processing unit for causing the telephony terminal apparatus to perform a method comprising the steps of:

operating an interface of the music reproduction unit to load a part of the score data from the memory unit into a score data memory of the music reproduction unit so as to store the loaded score data in the score data memory, the score data memory having a limited space capable of storing the part of the score data;

sequentially retrieving the score data from the score data memory for setting a tone generator of a frequency modulation type provided in the music reproduction unit with parameters according to the retrieved score data;

generating harmonics by frequency modulation of the tone generator according to the set parameters so as to synthesize a tone of the music piece based on the retrieved score data; and

detecting when a vacant area is created in the limited space of the score data

memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the synthesizing of the tones of the music piece.

39. (previously presented) A machine readable medium for use in reproducing a music piece by a telephony terminal apparatus having a processor and a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, the medium containing program instructions executable by the processor for causing the telephony terminal apparatus to perform a method comprising the step of:

operating an interface to load a part of score data which represents a music piece from a data source of the telephony terminal apparatus into a score data memory so as to store the loaded score data in the score data memory, the score data memory having a limited space capable of storing the part of the score data;

sequentially retrieving the score data from the score data memory so as to set a tone generator with a variable parameter derived from the retrieved score data for sequentially generating tones of the music piece in association with the telephony function; and

detecting when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data for operating the interface to load another part of the score data into the vacant area, thereby enabling the tone generator to continue the generating of the tones of the music piece.

40. (previously presented) A machine readable medium for use in reproducing a music piece from a telephony terminal apparatus having a processor that processes a

data to execute a task with a telephony function of transmitting a signal to a remote location and receiving a signal from the remote location, a memory device that stores data including score data representative of a music piece, and a music reproduction device that operates according to the score data under control by the processor to reproduce a music piece in association with the task, the medium containing program instructions executable by the processor for causing the telephony terminal apparatus to perform a method comprising the steps of:

operating an interface of the music reproduction device to load a part of the score data from the memory device of the telephony terminal apparatus into a score data memory of the music reproduction device so as to store the loaded score data in the score data memory, the score data memory having a limited space capable of storing the part of the score data;

sequentially retrieving the score data from the score data memory so as to set a tone generator of the music reproduction device with a variable parameter derived from the retrieved score data for sequentially generating tones of the music piece in association with the telephony function; and

notifying the processor when a vacant area is created in the limited space of the score data memory upon sequential retrieval of the score data, so that the processor operates the interface to load another part of the score data from the memory device into the vacant area of the limited space of the score data memory, thereby enabling the tone generator to continue the generating of the tones of the music piece.